DOCUMENT RESUME

ED 451 313 UD 034 094

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TITLE An Update on the "Cycle of Violence." Research in Brief.

INSTITUTION Department of Justice, Washington, DC. National Inst. of Justice.
SPONS AGENCY National Inst. on Alcohol Abuse and Alcoholism (DHHS), Rockville, MD.; National Inst. of Mental Health (DHEW), Rockville, MD.
REPORT NO NCJ-184894
PUB DATE 2001-02-00
NOTE 10p.
CONTRACT 86-IJ-CX-0033; 89-IJ-CX-0007; 93-IJ-CX-0031-S1; AA09238; MH49467
AVAILABLE FROM U.S. Department of Justice, Office of Justice Programs, National Institute of Justice, Washington, DC 20531; Web site: http://www.ojp.usdoj.gov/nij.
PUB TYPE Reports - Research (143)
EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Blacks; *Child Abuse; *Child Neglect; *Crime; *Delinquency; Males; Racial Differences; Sex Differences; *Violence
IDENTIFIERS Arrest Records; *Arrests; Juvenile Crime

ABSTRACT

This brief updates a longitudinal study comparing the arrest records of abused and neglected children with arrest records of non-abused or neglected children. Subjects included 908 substantiated cases of childhood abuse or neglect processed by the courts from 1967-71 who were matched by sex, age, race, and family socioeconomic status with 667 children not officially deemed abused or neglected. Initial results were gathered in 1988, when the average age of subjects was 26 years. Findings showed that childhood abuse and neglect increased the odds of future delinquency and adult criminality by 29 percent. The updated results were based on additional arrest data gathered from 1994, with subjects ranging in age from 18-40 years. Results documented the persistence of the relationship in demonstrable long-term consequences for criminal behavior. Poor educational performance, mental health problems, and low achievement levels also characterized victims of early childhood abuse and neglect. Though earlier results indicated that most abused and neglected children did not become offenders, this study found that almost half of abused and neglected individuals had an arrest for a nontraffic offense. For some subgroups (blacks and abused and neglected males), almost two-thirds had been arrested as juveniles or adults. (SM)

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ED 451 313

AN UPDATE ON THE "CYCLE OF VIOLENCE"
NATIONAL INSTITUTE OF JUSTICE
RESEARCH IN BRIEF

Cathy S. Widom and Michael G. Maxfield

February 2001
U.S. Department of Justice, Office of Justice Programs

UD034094

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Research in Brief

Julie E. Samuels, Acting Director

February 2001

Issues and Findings

Discussed in this Brief: Updated results of a longitudinal study that compared the arrest records of abused and/or neglected children with arrest records for children who were not abused or maltreated. Subjects included 908 substantiated cases of childhood abuse or neglect processed by the courts from 1967 through 1971 who were matched by sex, age, race, and approximate family socioeconomic status with a comparison group of 667 children not officially recorded as abused or neglected.

Initial results were gathered in 1988, when the average age of subjects was 26 years. Those findings showed that childhood abuse and neglect increased the odds of future delinquency and adult criminality overall by 29 percent. The updated results discussed in this Brief are based on additional arrest data gathered in 1994.

Key issues: Childhood victimization represents a widespread, serious social problem. General delinquency research shows that childhood abuse (physical and sexual) is often associated with delinquency and that the early onset of maltreatment may increase the variety, seriousness, and duration of problems. It is also widely suggested that violence begets violence—that today's abused children become tomorrow's violent offenders.

Further, children who suffer from neglect—not physical abuse—are

continued...

An Update on the "Cycle of Violence"

By Cathy S. Widom and Michael G. Maxfield

Do childhood abuse and neglect lead to adult criminal behavior? How likely is it that today's abused and neglected children will become tomorrow's violent offenders? Did the picture change when these individuals' records were updated after 6 years?

In one of the most detailed studies of the issue to date, research sponsored by the National Institute of Justice (NIJ) found that childhood abuse and neglect increased the odds of future delinquency and adult criminality overall by 29 percent. When data were initially checked in 1988, the average age of subjects was 26 years. About 65 percent of the sample had passed through the peak years of committing violent offenses (ages 20 to 25 years). This update reports new arrest data collected in 1994, when subjects averaged 32.5 years of age and only 1 percent of the sample had not passed through the peak offending years. The examination of updated data on the same subjects 6 years later reveals findings that are similar in some respects, but quite different in others.

The study followed 1,575 cases from childhood through young adulthood, comparing the arrest records of two groups:

- A study group of 908 substantiated cases of childhood abuse or neglect processed by the courts from 1967 through 1971 and tracked through official criminal records over approximately 25 years.
- A comparison group of 667 children, not officially recorded as abused or neglected, matched to the study group according to sex, age, race, and approximate family socioeconomic status.

Although many individuals in both groups had no juvenile or adult criminal record, *being abused or neglected as a child increased the likelihood of arrest as a juvenile by 59 percent, as an adult by 28 percent, and for a violent crime by 30 percent.*

The "cycle of violence" hypothesis suggests that a childhood history of physical abuse predisposes the survivor to violence in later years. This study reveals that victims of neglect are also likely to develop later violent criminal behavior. If violence is begotten by not only violence, but also by neglect, far more attention needs to be devoted to the families of children who are abandoned and severely malnourished.

This study relied on arrest records to measure delinquency and criminality, initially checked in 1988.[1] Updated arrest records were collected in 1994, and results from this update are presented in this Research in Brief.

Additional support for this study was provided by the National Institute on Alcohol Abuse and Alcoholism and the National Institute of Mental Health.

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Issues and Findings

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also at risk. In one study of the influence of early malnutrition on subsequent behavior, previously malnourished children had attention deficits, reduced social skills, and poorer emotional stability than a comparison group.

Key findings:

- Being abused or neglected as a child increased the likelihood of arrest as a juvenile by 59 percent, as an adult by 28 percent, and for a violent crime by 30 percent.
- Maltreated children were younger at the time of their first arrest, committed nearly twice as many offenses, and were arrested more frequently.
- Physically abused and neglected (versus sexually abused) children were the most likely to be arrested later for a violent crime.
- In contrast to earlier research findings, the new results indicate that abused and neglected females were also at increased risk of arrest for violence as juveniles and adults.
- White abused and neglected children were no more likely to be arrested for a violent crime than their nonabused and nonneglected white counterparts. In contrast, black abused and neglected children in this sample showed significantly increased rates of violent arrests compared with black children who were not maltreated.
- An out-of-home placement was not related to the number of arrests among those who were removed from their homes due only to abuse and neglect.

Target audience: Juvenile authorities, child welfare professionals, police, teachers, and health care workers.

Study design

Several important design features distinguish this research from prior efforts to study the intergenerational transmission of violence.[2] First, by following a large number (1,575) of cases from childhood through adolescence and into young adulthood, this prospective study was able to examine the long-term consequences of abuse and neglect. The sample, drawn from a metropolitan area in the Midwest, was restricted to children who were 11 years of age or younger at the time of the abuse or neglect.

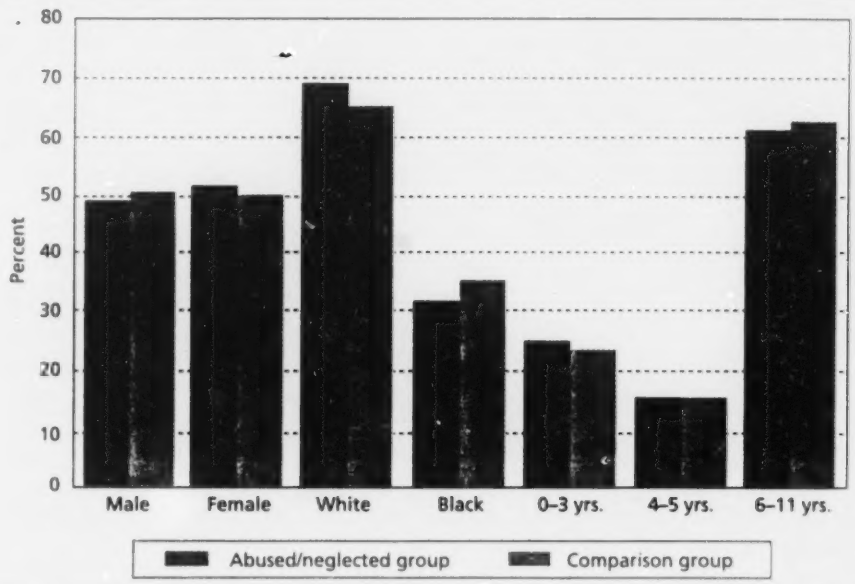
Arrest records were originally examined in 1988. When juvenile and adult criminal records were reexamined in 1994, the age of the subjects ranged from 18 to 40 years old. Fewer than 1 percent were younger than 25 years of age, and the mean age of the group was 32.5 years.

Matching members of the study group to others whose official records showed no childhood abuse or neglect was an equally important feature of the research. This design allowed the study to separate known correlates of delinquency and criminality (age, sex, race, and socioeconomic status) from the experience of child abuse and neglect. Both groups were approximately two-thirds white and one-third black and were about evenly divided between males and females. Most were between the ages of 6 and 11 years old at the time the abuse was documented or matches were made (see exhibit 1).

The study design also featured clear operational definitions of abuse and neglect. Combined with large sample sizes, this permitted the separate examination of physical abuse, sexual abuse, and neglect, defined as follows:

- **Physical abuse** cases included injuries such as bruises, welts, burns, abrasions, lacerations, wounds, cuts, bone and skull fractures, and other evidence of physical injury.
- **Sexual abuse** charges varied from relatively nonspecific charges of "assault and battery with intent to

Exhibit 1. ***Demographic characteristics***



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gratify sexual desires" to more specific ones, such as "fondling or touching in an obscene manner," sodomy, rape, and incest.

- **Neglect** cases reflected a judgment that the parents' deficiencies in child care were beyond those found acceptable by community and professional standards at the time. These cases represented extreme failure to provide adequate food, clothing, shelter, and medical attention to children.

Juvenile court and probation records were the source of information on abuse or neglect and family characteristics. Arrest data were obtained from Federal, State, and local law enforcement records. Recognizing that much child abuse (as well as later delinquent and criminal behavior) never comes to the attention of any official authority, a second phase of this research was undertaken to supplement official records with interview results. A comparison of official records and self-report information for these subjects is described in a recent article.[3]

Study findings

Of primary interest was the question, "Would arrest histories of those who had been abused or neglected be worse than those with no reported abuse?" The answer, shown in exhibit 2, was evident: Those who had been abused or neglected as children were more likely to be arrested as juveniles (27 percent versus 17 percent), adults (42 percent versus 33 percent), and for a violent crime (18 percent versus 14 percent).

The abused and neglected cases were younger at first arrest (mean = 16.5 years versus 17.3 years), committed nearly twice as many offenses (mean = 2.4 versus 1.4), and were arrested more frequently (17 percent of abused and neglected cases versus 9 percent of comparison cases had more than five arrests). This information is important because of the finding in the general delinquency literature that shows early onset is associated with increased variety, seriousness, and duration of problems.[4]

Exhibit 2. ***Extent of involvement in delinquency, adult criminality, and violent criminal behavior, in percent***

Type of Arrest	Abused and Neglected Group (n = 908)	Comparison Group (n = 667)
Juvenile	27.4	17.2
Adult	41.6	32.5
Violent Crime	18.1	13.9

Note: All differences are significant.

Our research was conducted in a metropolitan county area in the Midwest, using cases of abuse and neglect that came to the attention of the courts during the years 1967 through 1971. Other researchers report similar findings. As part of the Rochester Youth Development Study, Thornberry and his colleagues collected information from the Department of Social Services in Rochester, New York, about abused and neglected children in their longitudinal study. Using self-reports and official arrest information, Smith and Thornberry[5] found that child maltreatment was a significant risk factor for delinquency and self-reported violent behavior, even when gender, race or ethnicity, family structure, and social class were controlled.

Another study examined maltreated children and two nonmaltreated comparison samples (one from the schools and one from the Department of Health and Social Services records) in another geographic area (Mecklenburg County, North Carolina). Zingraff and colleagues[6] found that maltreated children had higher rates of delinquency and violence complaints than nonmaltreated school and impoverished children.

Thus, in three quite different prospective studies covering different parts of the country and using cases from different time periods, childhood abuse and neglect have been found to increase risk of crime and delinquency. This is important because similar findings based on such different sampling procedures increase the validity of generalizing the results. Presently, NIJ is funding a fourth study to examine the relationship between child abuse and neglect and subsequent criminal outcomes in the Nation's Northwest region.

Sex. The experience of early childhood abuse or neglect had a substantial impact on individuals with little likelihood of engaging in officially recorded adult criminal behavior. Males generally have higher rates of criminal behavior than females, but females abused or neglected in childhood were 73 percent more likely than control group females to be arrested for property, alcohol, drug, and such misdemeanor offenses as disorderly conduct, curfew violations, or loitering. In contrast to earlier findings, these

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new results indicate that abused and neglected females were also at increased risk of arrest for violence as juveniles and adults (see exhibit 3).

Because these findings are based on official criminal records, it is possible that differences represent spurious findings. It is particularly tempting to dismiss the findings about females because the base rates are so low. However, these findings have been subjected to more stringent multivariate analyses with the same results. Because few studies have looked at these relationships, it is hard to explain the findings in any conclusive way.

Interestingly, the pattern of increased risk differed for males and females. Compared with controls, abused and neglected females were at increased risk of arrest for a violent crime as a juvenile or adult, despite the fact that females are less likely to be arrested for violence. This pattern was not evident for males. Compared with control males, abused and neglected males were *not* at increased risk for violent offending as juveniles or adults.

The apparent lack of increased risk for violent offending by abused and neglected males was surprising. One possible explanation is that having an arrest for violence is not such an unusual occurrence among a sample like this. For this reason, we reexamined these data using a different dependent variable: the number of arrests for violence. Abused and neglected males were found to have a significantly larger number of arrests for violence than control males. Thus, a gender difference exists in the effect of childhood victimization on risk for arrest for violence. For females, there is an increased risk for participation. For males, there is an increased risk in the frequency of participation (the number of violent arrests). Childhood victimization increases arrests for violence among females and males, but in different ways.

Race. Both black and white abused and neglected children were more likely to be arrested than comparison children. However, as shown in exhibit 4, the difference among whites was not as great as that among blacks. In fact, white abused and neglected children were no more likely to be arrested for a violent crime than their nonabused and nonneglected counterparts. This contrasts sharply with findings for black children in this sample, who showed significantly increased rates of violent crime arrests than black children who were not abused or neglected.

This is a surprising finding. We can only speculate that these results may reflect differences in a number of environmental factors, including poverty levels, family characteristics, the nature of the abuse or neglect incident, access to counseling or support services, treatment by juvenile authorities, or exposure to levels of violence in the community. Understanding what appears to be a differential effect of childhood victimization by race is an important challenge for future research.

Juvenile record. Abused and neglected individuals were at higher risk of arrest, at a younger age, with more significant and repeated criminal involvement. Notably, however, among those arrested as juveniles, abused or neglected persons were no more likely to continue being arrested than control subjects.

Exhibit 3. ***Involvement in criminality by gender, in percent***

Type of Arrest	Abused and Neglected Group	Comparison Group
Any Arrest		
Male	62.1	54.8*
Female	37.6	21.9***
Property		
Male	43.2	29.3***
Female	17.8	11.1***
Order		
Male	35.9	29.0*
Female	16.3	7.2***
Violent		
Male	28.4	24.2
Female	8.2	3.6**
Alcohol		
Male	27.1	26.0
Female	9.9	6.0*
Drugs		
Male	22.8	17.1*
Female	6.9	2.1**

*$p < .05$. **$p < .01$. ***$p < .001$.

Note: Number of males = 777 and females = 798.

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Exhibit 4. ***Involvement in criminality by race, in percent***

Type of Arrest	Abused and Neglected Group (*n* = 900)	Comparison Group (*n* = 667)
Juvenile		
Black	40.6	20.9***
White	21.8	15.2**
Adult		
Black	59.8	43.6***
White	33.8	26.6*
Violent Crime		
Black	34.2	21.8**
White	11.0	9.7

*$p < .05$. **$p < .01$. ***$p < .001$.

Exhibit 5. ***Does only violence beget violence?***

Abuse Group	Number of subjects	Percentage Arrested for Violent Offense
Physical Abuse Only	76	21.1
Neglect Only	609	20.2
Sexual Abuse Only	125	8.8
Mixed	98	14.3
Control	667	13.9

- In both groups, roughly the same proportion of abused and neglected children and controls with juvenile arrests had arrests as adults (71 percent versus 66 percent).
- Similarly, in both groups, about the same proportion of those with violent juvenile arrests also had violent arrests as adults (63 percent versus 61 percent).

In short, childhood abuse and neglect had no apparent effect on the continuation of juvenile offending into adulthood. Distinguishing the factors that promote the onset of criminal behavior from those that affect persistence in a criminal career is recommended as an important topic for future research.

Does only violence beget violence?

To test the notion that childhood victims of violence resort to violence themselves in later years, violent criminal behavior was examined as a function of the type of maltreatment experienced as a child. The results are presented in simplified form in exhibit 5.

Exhibit 5 shows that physically abused (as opposed to neglected or sexually abused) children were the most likely to be arrested later for a violent crime. The neglected group, however, was only slightly less likely to be arrested for a violent crime. Victims of sexual abuse were least likely to have an arrest for violence, although this is somewhat misleading because victims of sexual abuse were overwhelmingly female (84 percent), and females less often had a record of violent offenses. Different types of abuse and neglect are not distributed evenly by age, sex, and race. However, even after controlling for age, sex, and race, the relationship between childhood neglect and subsequent violence remained evident.

Nationwide, the incidence of neglect is almost two and a half times that of physical abuse (15.9 per 1,000 children in 1986, compared with 5.7 per 1,000 for physical abuse, and 2.5 per 1,000 for sexual abuse).[7] Neglect also is potentially more damaging to the development of a child than physical abuse (provided the abuse involves no neurological impairment). In one study of the influence of early malnutrition on subsequent behavior, previously malnourished children had attention deficits, reduced social skills, and poorer emotional stability than a comparison group.[8] Other researchers have found an array of developmental differences associated with childhood neglect.[9] Coupled with the present study's findings of a greater risk of later criminal violence among neglected children, these behavioral and developmental differences suggest a need for concerted preventive action.

Furthermore, these research findings show the importance of improved procedures for the identification of child abuse and neglect. Referring to the connection between child maltreatment and adult criminality, New York City instituted procedures for police response and followup in cases involving suspected child abuse and neglect.[10] In jurisdictions that have adopted community policing, officers may be better able to detect early

signs of child maltreatment by fostering closer ties to community residents. By making referrals to appropriate social service agencies, police also may be able to prevent more serious problem outcomes down the road.

Out-of-home placement and criminal consequences

Not all abused and neglected children grow up to become delinquents, adult criminals, or violent criminal offenders. What are some of the possible mediating variables that act to buffer or protect abused and neglected children? Placement outside the home was investigated as one possible buffer. Scholars and practitioners have criticized out-of-home placements (foster care, in particular). Children placed outside the home are considered a particularly vulnerable group, because they have experienced both a disturbed family situation and separation from their natural parents. Accordingly, child welfare policies today often seek to avoid removing the child from home and instead try to mitigate negative family situations through counseling and related support, such as intensive family preservation services.

In contrast to today's practices, the vast majority of these children who were abused and neglected roughly 30 years ago were placed outside the home during some portion of their childhood or early adolescence. Annual information on placement was available from juvenile court and probation records of 772 children. For these, out-of-home placements included foster care, guardians' homes, and schools for the retarded or physically handicapped. Only 14 percent of these abuse and neglect cases had no record of having been placed out of the home through age 18. The average amount of time in placement was about 5 years and sometimes lasted through childhood and adolescence.

As exhibit 6 shows, there was remarkably little difference between the arrest records of those who remained at home and those who were placed outside the home due to abuse and neglect. Predictably, both groups were strikingly different from those placed outside the home due to both delinquency and abuse or neglect. At least for this sample, then, an out-of-home placement did not negatively affect the arrest measure for those who were removed from their homes due only to abuse or neglect.

Additional analysis showed that stability may be an important factor in out-of-home placements. Children who were moved three or more times had significantly higher arrest rates (almost twice as high) for all types of criminal behaviors—juvenile, adult, and violent—than children who were moved fewer than three times. In turn, children with multiple placements typically had records of behavior problems in their files. These notations covered a wide spectrum of problem behaviors, including chronic fighting, fire setting, destructiveness, uncontrollable anger, sadistic tendencies, and extreme defiance of authority. Whether the behavior problems caused the move or the moves contributed to the behavior problems is unclear. In either case, children with numerous placements are likely to need special services.

These findings challenge the assumption that it is necessarily unwise to remove children from negative family situations. Although stability of placement appears to be important, the potential damage of removing an abused and neglected child from the home did not include a higher likelihood of arrest or violent criminal behavior.

Additional research in progress

A second phase of this research—with support from NIJ, the National Institute of Mental Health, the National Institute on Alcohol Abuse and Alcoholism, and the National Institute on Drug Abuse—was designed to address many of the unanswered questions from the first phase by finding and interviewing a large number of subjects 20 to 25 years after the childhood vic-

Exhibit 6. ***Juvenile and adult arrests as a function of placement experiences for juvenile court cases only (N = 772)***

Type of Placement	N	Arrest (%)			
		Juvenile (*n* = 215)	Adult (*n* = 317)	Both Juvenile and Adult (*n* = 155)	Violent (*n* = 148)
No Placement	106	16.0	44.3	10.4	15.1
Abuse/Neglect Placement Only	489	18.6	37.0	12.5	14.1
Delinquency Placement Plus Abuse/Neglect	96	92.7	78.1	71.9	53.1
Significance		***	***	***	***

***$p < .001$

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timization. Inperson followup interviews inquired about recollections of early childhood experiences, schooling, and adolescence; possible undetected alcohol and drug problems; possible undetected delinquency and criminality; and important life experiences. The followup was designed to examine a much fuller range of consequences of childhood victimization experiences and to determine why some victims of childhood abuse and neglect fare well, while others have more negative consequences.

Findings based on 2-hour followup interviews with 1,196 abused and neglected and comparison group subjects indicate that other negative outcomes may be common as well:

- Mental health concerns (suicide attempts and posttraumatic stress disorder[11]).
- Educational problems (extremely low IQ scores and reading ability).[12]
- Occupational difficulties (lack of work, high rates of unemployment, and employment in low-level service jobs).
- Public health and safety issues (prostitution in males and females[13] and alcohol problems in females).[14]

In addition to documenting the broader consequences of childhood victimization, a goal of these followup interviews was to identify protective factors that may buffer the negative results of abuse and neglect. The ultimate goal was to provide a knowledge base on which to build appropriate prevention and treatment programs.

Conclusions and implications

Childhood victimization represents a widespread, serious social problem. Earlier reports demonstrated that child abuse and neglect increased the likelihood of delinquency, adult criminality, and violent criminal behavior. These updated results document the persistence of the relationship in demonstrable long-term consequences for criminal behavior. Poor educational performance, mental health problems, and generally low levels of achievement also characterize victims of early childhood abuse and neglect studied here.

Earlier writings based on this research emphasized that the majority of abused and neglected children in the sample did not become offenders. That earlier conclusion must be modified. At present, almost half of the abused and neglected individuals overall (49 percent) have had an arrest for a nontraffic offense (juvenile or adult). For some subgroups (blacks and abused and neglected males), almost two-thirds have been arrested as juveniles or adults. Childhood victimization increased the risk of being arrested and being arrested for a violent crime. But it may best be viewed as one among a constellation of risk factors.

These results suggest at least three messages to juvenile authorities and child welfare professionals:

- *Intervene early.* These updated findings reinforce the need for police, teachers, and health care workers to recognize the signs of abuse and neglect and make serious efforts to intervene as early as possible. The later the intervention, the more difficult the change process becomes. It is suggested that special attention be paid to abused and neglected children with early behavior problems. These children show the highest risk of later juvenile and adult arrest, as well as violent criminal behavior.
- *Recognize the high risks of neglect, as well as of child physical abuse.* Also important in its implications for juvenile court and child welfare action is the fact that neglect alone (not exclusively physical abuse) was significantly related to violent criminal behavior. A picture emerges where physical abuse may be only one point on a continuum of family situations that contribute to violence. Whether those situations result in active physical abuse or more passive neglect, it is now quite clear that both forms of child maltreatment seriously threaten the healthy development of children. Neglect cases represent the majority of cases taxing the child protection system. This research shows that today's victims of neglect may well be tomorrow's violent offenders.
- *Examine out-of-home placement policies.* This NIJ study focused on cases during the period 1967 through 1971, when out-of-home placements were a common intervention. Detailed information available for 772 cases revealed that a large majority (86 percent) were placed outside their homes for an average of 5 years. This contrasts sharply with today's efforts in many places to avoid out-of-home placement on the assumption that separation may aggravate, rather than ameliorate, a child's problems. Yet, we found no evidence that those who were separated from their families fared any worse on arrest measures than those who remained at home. Though these results are far from definitive, they suggest that child protective policies in this area deserve close scrutiny. The assumption that removal from the home offers additional risk could not be confirmed by this study. Any policy founded on this assumption should be tested through careful local studies of the full consequences of out-of-home placement.

Notes

1. C.S. Widom, *The Cycle of Violence*, Research in Brief, Washington, D.C.: U.S. Department of Justice, National Institute of Justice, October 1992, NCJ 136607.

2. For further information on the design and sampling procedures, see C.S. Widom, "Child Abuse, Neglect, and Adult Behavior: Research Design and Findings on Criminality, Violence, and Child Abuse," *American Journal of Orthopsychiatry* 59 (1989): 355–367; M.G. Maxfield and C.S. Widom, "The Cycle of Violence: Revisited Six Years Later," *Archives of Pediatrics and Adolescent Medicine* 150 (1996): 390–395.

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The research for this study was supported by grants from the National Institute of Justice (86–IJ–CX–0033, 89–IJ–CX–0007, and 93–IJ–CX–0031–S1) as well as the National Institute on Alcohol Abuse and Alcoholism (AA09238) and the National Institute of Mental Health (MH49467).

10. B. Ward, Commissioner, New York City Police Department, press release no. 17, May 22, 1989.

11. C.S. Widom, "Posttraumatic Stress Disorder in Abused and Neglected Children Followed-Up," *American Journal of Psychiatry* 156 (1999): 1223–1229.

12. C.M. Perez and C.S. Widom, "Childhood Victimization and Long-Term Intellectual and Academic Outcomes," *Child Abuse and Neglect* 18 (1994): 617–633.

13. C.S. Widom and J. Kuhns, "Childhood Victimization and Subsequent Risk for Promiscuity, Prostitution, and Teenage Pregnancy," *American Journal of Public Health* 86 (11) (November 1996): 1607–1612.

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Findings and conclusions of the research reported here are those of the authors and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

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